SEPA ENVIRONMENTAL CHECKLIST
(from WAC 197-11-960)

A. Background

1. Name of the proposed project, if applicable:

   Dry Cask Storage Yard and Roadway Construction Project

2. Name of applicant:

   Energy Northwest

3. Address and phone number of applicant and contact person:

   W.A. Kiel (Mail Drop PE20)
   Energy Northwest
   P.O. Box 968
   Richland, Washington 99352-0968
   Telephone Number: 509-377-4490
   wakiel@wnp2.com

4. Date checklist prepared:

   April 27, 2000

5. Agency requesting checklist:

   Energy Facility Site Evaluation Council (EFSEC)

6. Proposed timing or schedule (including phasing, if applicable):

   Construction is expected to begin during the first quarter of 2001. The project will be broken into two construction phases. A two-pad cask storage yard, equipment storage building, construction work pad, utility installation, and the transport roadway will be constructed when authorized. The second phase will add three additional pads to the cask storage yard. No date has been set for this expansion. The environmental analysis has been performed assuming the construction of all five (5) pads. Roadway maintenance or upgrades will be necessary in the future.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

   There are no plans for expanding on this proposal beyond the two construction phases explained above.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

   Additional information is included in the Site Certification Agreement (SCA) amendment request prepared in accordance with WAC 463-36-030. Extensive documentation regarding the general site area was prepared pursuant to NEPA and SEPA to support decisions to construct WNP-2. The use of the dry cask storage method is licensed and regulated by the U.S. Nuclear Regulatory Commission (NRC). Environmental information prepared by the NRC as an adjunct to rulemaking for these activities has been available for public comment as noticed in the Federal Register.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by the proposal? If yes, explain.

   None. The proposed interim storage location is within the WNP-2 exclusion area.

10. List any government approvals or permits that will be needed for your proposal, if known.

    The interim storage of spent fuel in dry casks at power reactor sites is authorized and regulated by the U.S. Nuclear Regulatory Commission (NRC). The existing Site Certification Agreement and the powers vested in EFSEC preempt the need for additional permits from other jurisdictions (RCW 80.50.110 and RCW 80.50.120).

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify the form to include additional specific information on project description.)

    Energy Northwest proposes to construct a dry cask storage facility at the site of its electric power plant located in Benton County approximately 12 miles north of Richland, Washington. The proposed activity includes the construction of a fenced cask storage yard and an equipment storage building. The project also includes upgrades to plant roadways for heavy loads and the installation of attendant security and utility systems. The proposed construction activity is entirely located within the area previously disturbed by plant construction.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

    The construction activities are located on the WNP-2 plant site in the yard areas north and east of the facility. This site is located approximately 12 miles north of Richland,

Washington near the center of Section 5, Township 11 North, Range 28 East in Benton County. The location is indicated on figures included in the amendment request submitted to EFSEC.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site:

The storage area, building site, and roadway upgrades are located in the yard areas north and east of the WNP-2 plant site. The immediate area is generally flat and cleared of vegetation by previous construction activities.

b. What is the steepest slope on the site (approximate percent slope)?

The plant site is located in flat rolling terrain with gentle slopes. The storage area is located in a yard area that was previously disturbed during the plant's construction. At that time, the area was covered with earth fill materials and graded flat.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

The soils in the project area are comprised of sand, coarse sand, and some gravel. No farmland is located near the proposed site.

d. Are there any indications or history of unstable soils in the immediate vicinity? If so, describe.

None.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

The storage area, roadway, work pad, and the associated building foundations will be excavated as specified by the geotechnical consultant prior to construction. A combined total of approximately 26,000 cubic yards of material will be excavated over the life of the project (i.e., phase 1 and phase 2). Excavated materials will placed in the nearby WNP-2 or WNP-1/4 landfill areas. Both onsite and offsite fill [graded gravel purchased offsite and coarse sand (6000 cubic yards) obtained locally] will be necessary to complete the project. Onsite fill will be obtained from either the WNP-1 or the WNP-2 landfill areas.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Limited wind erosion is possible during during construction. Wind erosion after placement of the gravel is unlikely.

g. About what percent of the site will be covered with impervious surfaces after project (for example, asphalt or buildings)?

Two buildings and the work pad that will be constructed will cover about 7,000 square feet. The five (5) cask storage pads will total about 20,000 square feet. As a percentage of the WNP-2 industrial site area, the impervious surfaces for this project total about 3%.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Water may be applied to reduce fugitive dust during construction.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Local fugitive dust is likely during movement of heavy equipment during construction of the storage yard and roadway revisions. The only air emissions associated with the project would be a minor amount of diesel engine exhaust from the transport vehicle. The storage casks are sealed and have no air emissions.

b. Are there any off-site sources of emissions or odor that may affect your proposal?

No.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Temporary measures such as water application or gravel placement may be necessary to control fugitive dust during construction.

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

There are no surface water bodies in the immediate vicinity of the site. The Columbia River is located more than three miles east of the site.

2) Will the project require any work over, in, or adjacent to (within 200 feet), the described waters? If yes, please describe and attach available plans.

No.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No.

b. Ground:

1) Will groundwater be withdrawn, or will water be discharged to groundwater?

No.

2) Describe waste materials that will be discharged into the ground from septic waste tanks or other sources, if any (for example domestic sewage; industrial, containing the following chemicals ... ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

None. No ground discharges are necessary. Sanitary waste service for the equipment storage building will be provided by connection to the existing sewage system.

c. Water Runoff (including storm water):

1) Describe the source of runoff (including storm water) and methods of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

None. The climate at the disposal site is characterized as mid-latitude semiarid. The area is subject to low humidity, large diurnal and annual ranges of temperatures, and modest precipitation averaging 6 to 7 inches annually and occurring mostly as rain in the winter and spring months.

2) Could waste materials enter ground or surface waters? If so, generally describe.

No. The storage canisters are dried internally before being welded shut. They have no liquids that could leak.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

None are necessary.

4. Plants

a. Check the types of vegetation found on the site:

__ deciduous tree: alder, maple, aspen, other
__ evergreen tree: fir, cedar, pine, other
x shrubs
x grass
__ pasture
__ crop or grain
__ wet soil plants
__ water plants
__ other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

Vegetation removal will be negligible since the project construction will occur in areas previously disturbed by construction of WNP-2. The cask storage yard and equipment storage building are located in a graveled yard area that is largely devoid of vegetation. Construction of the transport roadway will consist of upgrades to existing site roads.

c. List threatened or endangered species known to be on or near the site.

No federally listed threatened or endangered plant species are on or near the storage yard site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

None.

5. Animals

   a. Identify any birds and animals which have been observed on or near the site or are known to be near the site:

      birds: *meadowlark, blackbird, swallow, cowbird, kingbird, gull*
      mammals: *mule deer, coyote, jackrabbit, pocket mouse*
      fish: *none - the site is three miles from a water body*

   b. List any threatened or endangered species known to be on or near the site.

      No federally listed threatened or endangered birds or mammals are on or near the proposed storage yard site.

   c. Is the site part of a migration route? If so explain.

      The Columbia River drainage in the vicinity of the site is a segment of the Pacific flyway, a migratory bird route. As noted elsewhere, the specific location is three (3) miles from the river.

   d. Proposed measures to preserve or enhance wildlife, if any:

      None.

6. Energy and Natural Resources

   a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

      No electricity is required for the storage casks. Minor electrical power is necessary for lighting, security systems, and remote monitoring instrumentation.

   b. Would the project affect the potential use of solar energy by adjacent properties? If so generally describe.

      No.

   c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

      Not applicable.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

A radiation field surrounds the storage casks. The projected radiological doses from this activity satisfy the NRC requirements of 10 CFR Part 72. Individual doses are a function of time and distance from the casks. Energy Northwest has the authority to control activities and restrict access to those areas around the storage yard as necessary for the protection of public safety.

1) Describe special emergency services that might be required.

None. All special emergency services are handled by plant personnel.

2) Proposed measures to reduce or control environmental health hazards, if any:

The storage casks will be routinely monitored to assure cask integrity. Institutional controls such as access control, fences, and signs will be used as necessary.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None.

2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

No long-term noise would be created by or associated with the project. The noise associated with construction, and the periodic short-term noise generated by the operation of the diesel-powered transporter would be indistinguishable from other sources of noise on the industrial site.

3) Proposed measures to reduce or control noise impacts, if any:

None.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties?

The proposed storage area site is located at the site of an outdoor storage yard on property currently used for operation of a large thermal power plant (WNP-2) and the associated electrical switchyard. The adjacent properties are owned by the U.S.

Department of Energy and, with the exception of a nearby radioactive waste disposal burial ground (618-11), have not been developed.

b. Has the site been used for agriculture? If so, describe.

No.

c. Describe any structures on the site.

The storage facility will be constructed in the industrial yard area of a large electric power plant. There are many industrial and office buildings located on this plant site.

d. Will any structures be demolished? If so, what?

No.

e. What is the current zoning classification of the site?

The WNP-2 site is zoned as Unclassified Use district by Benton County.

f. What is the current comprehensive plan designation of the site?

The 1985 Benton County plan designates the WNP-2 area as "Hanford Reservation."

g. If applicable, what is the current shoreline master program designation of the site?

Not applicable.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, explain.

No.

i. Approximately how many people would reside or work in the completed project?

None.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Not applicable.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

Not applicable.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

c. Proposed measures to reduce or control housing impacts, if any:

None.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The storage casks are approximately 20 feet high and 11 feet in diameter. The equipment storage building will also be approximately 35 feet high with sheet steel siding. Yard lighting and utility poles will be about 40 feet tall.

b. What views in the immediate vicinity would be altered or obstructed?

None.

c. Proposed measures to reduce or control aesthetic impacts, if any:

None.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

The storage yard will be lit at night in accordance with NRC security requirements. It is planned that low-pressure sodium vapor lighting fixtures, similar to those employed in adjacent areas, will be used.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light and glare impacts, if any:

None.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

The project site is located within the exclusion area of WNP-2. The area is not used for recreation.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None.

13. Historic and Cultural Preservation

a. Are there places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

No.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site:

None.

c. Proposed measures to reduce or control impacts, if any:

None.

14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

WNP-2 has a paved access from Hanford Site Route 4.

b. Is the site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

No.

c. How many parking spaces would the completed project have? How many would the project eliminate?

The project has no relationship to the availability of, or demand for, parking spaces on the site.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

Yes. The existing private roads within the plant site along the transporter route must be upgraded for heavy loads.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

Not initially. The nearby rail transportation may be used in the future to ship the stored fuel to the federal repository or central storage facility.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

None.

g. Proposed measures to reduce or control transportation impacts, if any:

None.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No.

b. Proposed measures to reduce or control direct impacts on public services, if any:

None.

16. Utilities

a. List utilities currently available at the site (electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, etc.):

The WNP-2 site has all the facilities needed to support an industrial plant and the associated workforce.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

No utilities from off the WNP-2 site are required. Utility services will be supplied from the existing site infrastructure.

C. SIGNATURE

The above answers are true and complete to be best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: _____

Date submitted: _____